



# **Environment and Forest Department**

**Policy Note 2005-2006**

**Demand No.14**

## **Tamil Nadu Pollution Control Board**

#### **4. TAMILNADU POLLUTION CONTROL BOARD**

**4.1.** The Tamil Nadu Pollution Control Board, established in 1982, enforces the provisions of the Water (Prevention and Control of Pollution) Act, 1974 as amended, the Water (Prevention and Control of Pollution) Cess Act, 1977 as amended, the Air (Prevention and Control of Pollution) Act, 1981 as amended and the relevant provisions/rules of the Environment (Protection) Act, 1986 to prevent, control and abate pollution and for protection of environment.

The Board functions with its Head Office at Chennai. There are 25 District Offices at Chennai, Coimbatore, Vellore, Madurai, Tiruchirapalli, Ambattur, Tambaram, Vaniyambadi, Hosur, Cuddalore, Thanjavur, Karur, Salem, Namakkal, Erode, Tiruppur, Dindigul, Thirunelveli, Virudhunagar, Thoothukudi, Uthagamandalam, Nagercoil, Pudukkottai, Villupuram and Nagapattinam.

The Board has established 3 Advanced Environmental Laboratories at Chennai, Salem and Madurai, 10 District Environmental Laboratories at Ambattur, Vellore, Cuddalore, Tiruchirapalli, Dindigul, Thirunelveli, Coimbatore, Tiruppur, Hosur and Manali and one Mobile Environmental Laboratory at Thoothukudi.

#### **4.2. Monitoring of industrial pollution**

With the increasing pace of industrialisation in Tamil Nadu, the need for continuous monitoring of pollution from industrial sources has become significant. All industries have to take necessary pollution control

measures to meet the standards prescribed by the Board. The field officers of the Board periodically inspect every industry under their jurisdiction to assess the adequacy of pollution control measures provided to treat the effluent and gaseous emissions. For effective monitoring, the Board has classified the industries into red, orange and green, based on their pollution characteristics.

#### **4.3. Procedure for issue of consent**

The Board has laid down effluent standards, ambient air quality and emission standards. The Board issues consent to industries in two stages under the Water Act and the Air Act for establishment and operation of industrial units. Consent to establish an industry is issued depending upon the suitability of the site, before the industry takes up the construction activity. Consent to operate the industry is issued after installation of effluent treatment plant and air pollution control measures, before commissioning production. While issuing consent, the Board specifies the standards to be complied with by the industrial units. Consent order issued to industrial units includes in addition to primary conditions relating to emission and effluent, the conditions regarding obtaining ISO 14001 certificate (Environmental Management System), green belt development, rain water harvesting facilities, maintenance of Government health institutions, vehicle maintenance and responsible contracting of vehicles, good house keeping including non-use of throwaway plastics.

The Ministry of Environment and Forests, Government of India notified the Environmental Impact Assessment Notification, 1994 under the Environment (Protection) Act, 1986. As per the notification, 30 types of industries scheduled therein have to obtain the environmental clearance from the Government of India. As per the amendment dated 10.4.1997 issued in the Environmental Impact Assessment Notification, 1994, the Government of Tamil Nadu issued orders for constituting public hearing panels to consider the views of the public on these projects. Public hearings are being conducted from the month of May 1998 onwards in the respective District Collectorates for the applications received for setting up certain specified industries/projects. As on 31.12.2004, 286 public hearings have been conducted. On receipt of the recommendations of the public hearing panels constituted, the Board considers the issue of no objection certificate to those industries/projects. With the no objection certificate of the Board and the Environmental Impact Assessment report, the proponents have to approach the Ministry of Environment and Forests, Government of India for obtaining environmental clearance. After production of environmental clearance obtained from the Government of India, consent to establish an industry is issued by the Board.

The Board has granted 4,822 consent orders for establishment of industries under the Water Act and 4,752 consent orders for establishment of industries under the Air Act from 1995-1996 upto 31.12.2004. It has granted 22,663 consent orders to industries to operate under the Water Act and 19,828 consent orders to industries to operate under the Air Act from 1982-1983 upto 31.12.2004.

#### **4.4. Legal action**

As on 31.12.2004, the Board has issued 30,418 show cause notices and 4,401 closure orders to industrial units for not complying with the conditions stipulated by the Board. The Board has filed 321 cases under the Water (Prevention and Control of Pollution) Act, 1974 as amended and 134 cases under the Air (Prevention and Control of Pollution) Act, 1981 as amended against the erring industries for the contravention of pollution control laws.

#### 4.5. 17 Categories of highly polluting industries

The Board has a special monitoring cell at its head office, Chennai to monitor the 17 categories of highly polluting industries, specified by the Government of India. 190 large and medium units have been identified under 17 categories of highly polluting industries and these are being closely monitored by the Board.

#### 4.6. Common effluent treatment plants

The Board plays an important role in the establishment of common effluent treatment plants for clusters of small polluting industries in various parts of the State. Tamil Nadu is a pioneering State in India in establishing common effluent treatment plants. So far, proposals for 50 common effluent treatment plant schemes have been formulated. Of these, 33 Common Effluent Treatment Plant schemes are under operation and 17 common effluent treatment plant schemes are under various stages of implementation. The details of common effluent treatment plant schemes are as follows:-

Sl. No.	Sector	Number of Common Effluent Treatment Plants Formed	Number of Common Effluent Treatment Plants Under Operation
1	Tanneries	24 schemes	14 schemes
2	Textile Bleaching and Dyeing	25 schemes	18 schemes
3	Hotels and Lodging Houses	1 scheme	1 scheme
	<b>Total</b>	<b>50 schemes</b>	<b>33 schemes</b>

14 common effluent treatment plants at Pammal, SIDCO-Ranipet, SIPCOT Phase-II Ranipet, Vaniyambadi (Valayampet), Vaniyambadi (Udayenthiram), Ranipet (V.C.Mottur), Ranipet (Melpudupet), Ambur (Thuthipet), Ambur (Maligaithoppu), Pernambut (Bakkalapalli), Melvisharam, Dindigul, Madhavaram and Tiruchirapalli (Ramji Nagar) covering 624 tanneries have been commissioned. 18 common effluent treatment plants at Veerapandi, Chinnakkarai, Kasipalayam, Kunnangalpalayam, Andipalayam, Mannarai, Angeripalayam and Manickampurampudur in Tiruppur area, Karuppampalayam, Amaravathi Nagar, Thirumanilaiyur, Sukkaliyur, Ramakrishnapuram, Light house area, Sellandipalayam and Andankoil in Karur area, Ayyampet-Muthialpet in Kancheepuram district and at Perundurai in Erode district covering 817 textile bleaching and dyeing units have been commissioned. One common effluent treatment plant for 90 hotels and lodging houses at Kodaikkanal has also been commissioned.

Towards the implementation of common effluent treatment plants, State subsidy is granted by Government of Tamil Nadu, upto 25% of the project cost and Central subsidy is granted by Government of India, upto 25% of the project cost. The Board, after receiving the subsidy amount from Government, releases the amount to individual common effluent treatment plants based on the progress of the work.

The Government of Tamil Nadu has sanctioned Rs. 25.90 crores towards subsidy for 48 common effluent treatment plants and out of this Rs. 22.66 crores has been released as on 31.03.2003 through the Board

and Tamil Nadu Leather Development Corporation. During 2003-2004 and 2004-2005, State subsidy of Rs.57.66 lakhs has been granted to M/s. Kovai Telungupalayam Common Effluent Treatment Private Limited.

The Government of India has so far sanctioned Rs. 20.60 crores as Central subsidy to 48 common effluent treatment plants in Tamil Nadu and released the same through the Board, Tamil Nadu Leather Development Corporation and Industrial Development Bank of India. The Board has so far received Central subsidy of Rs. 12.84 crores and released Rs. 11.65 crores to common effluent treatment plants. Government of India has released Rs 4.29 crores through Tamil Nadu Leather Development Corporation and Rs. 3.47 crores through Industrial Development Bank of India to the common effluent treatment plants. Out of the Rs. 20.60 crores sanctioned by Government of India, Rs. 19.40 crores has thus been released.

#### **4.7. Cleaner technologies**

With active support and encouragement from the Board, industrial units in Tamil Nadu have started switching over to cleaner technologies such as adoption of membrane cell instead of mercury cell in caustic soda manufacturing, adoption of dry process instead of wet process to reduce air pollution in cement factories, adoption of double conversion and double absorption technology in sulphuric acid manufacturing, gas carburising instead of cyanide salts in heat treatment and cyanide free electroplating. Pulp and paper industries are being encouraged to go in for elemental chlorine free bleaching to reduce the formation of organo-chlorides including dioxins. Industries consuming ozone depleting substances are systematically changing to environment friendly compounds.

The common effluent treatment plant at Perundurai for textile dyeing units has provided on-line total dissolved solids monitoring device in the raw wash water line to automatically divert the high total dissolved solids (more than 2,100 mg/lit) effluent for evaporation along with the segregated dye bath effluent.

As a demonstration project, a model dust suppression and containment system for a stone crusher unit in Kancheepuram district and a model effluent treatment plant for a sago industry in Salem district have been installed. The Environmental Training Institute of the Board and the Centre for Environmental Studies, Anna University have proposed a training manual and conducted training programme on environmental management for electroplating industries.

The Board will conduct research oriented studies to promote cleaner technology in small scale industrial units like sago, stone crushing and foundries by engaging suitable agencies.

#### **4.8. Water conservation**

As a water conservation measure, three major industries in Manali and Basin Bridge area are utilising about 25mld of city sewage in their plants after tertiary treatment for cooling purposes. A major petroleum refinery unit at Manali, 19 textile dyeing units at Tiruppur and 3 tanneries at Ambur have provided reverse osmosis plants for recovering the process water from the effluent. The recovered water is reused in the process. The 19 textile dyeing units at Tiruppur have also provided salt recovery plant for reusing in the process. In sugar industries, water condensate from evaporators is being reused.

#### **4.9. Energy conservation**

As a measure for fuel conservation and recovery, all the distilleries are recovering methane gas from their spent wash through anaerobic digestion. Major sugar factories have installed co-generation power plants. The sago units recover methane gas from their trade effluent through anaerobic digestion. A tannery in Melvisharam has installed a power generator using methane recovered from anaerobic digestion of fleshings from tannery. Other industrial units are encouraged to use less energy and this is being audited through the environmental statements of the unit.

#### **4.10. Air quality monitoring**

With the increased industrial and commercial activities in the vicinity of major cities, the ambient air quality is affected by emissions from the industries and from the ever-increasing vehicular population. As per the provisions of the Air Act, the entire State of Tamil Nadu has been declared as air pollution control area.

#### **4.11. Ambient air quality monitoring**

The Board is monitoring the ambient air quality in Chennai (3 stations), Coimbatore (3 stations), Thoothukudi (3 stations), Madurai (3 stations) and Salem (1 station) under the National Ambient Air Quality Monitoring Programme. Under the State Ambient Air Quality Monitoring Programme, the Board has established 5 ambient air quality monitoring stations in Chennai city and 5 in Tiruchirapalli. The programmes monitor the air quality in residential, commercial and sensitive zones of the cities. The results of the programme are published every week in leading newspapers. Towards preparation of the environmental management plan for Chennai city, ambient air quality surveys have been conducted at 41 stations in Chennai to identify the most sensitive locations with respect to air pollution.

The major industrial complexes, especially the clusters of chemical industries, are being monitored continuously. With this in view, the Board has established 6 continuous ambient air quality monitoring systems at Cuddalore, Thoothukudi, Ranipet, Manali-Thiruvallur, Royapuram-Chennai, Kathivakkam-Thiruvallur at a cost of around Rs.40.00 lakhs each to assess the level of pollutants such as suspended particulate matter, sulphur dioxide, oxides of nitrogen, carbon monoxide, ammonia, chlorine, flourine, etc. in the ambient air and the adequacy of air pollution control measures provided by the industries. The Board instructs the concerned industrial units to improve the air pollution control measures, whenever the levels exceed the standards prescribed.

During the current year, towards strengthening of air quality monitoring, the activities of establishing one automatic continuous ambient air quality monitoring centre at Koyambedu in Chennai city, setting up of new manually operated high volume samplers in Madurai, Salem, Coimbatore, Trichy and Tirunelveli at a total cost of Rs. 72.00 lakhs and providing flue gas analysers to Board's laboratories at a cost of Rs. 39.00 lakhs are under process.

Highly polluting industries have been directed to establish their own continuous air quality monitoring systems. These units have also been asked to set up continuous stack monitoring systems with computer

recording arrangements so as to monitor emissions at the source itself. 42 industries have already installed these air quality monitoring systems. Self monitoring by industries through these mechanisms is being encouraged.

#### **4.12. Vehicle emission monitoring**

Urbanisation and industrialisation have resulted in increased vehicular traffic in cities, resulting in increase in automobile emissions and toxic smoke emissions. The Board is carrying out the vehicle emission monitoring since 1992 for testing the emissions from goods transport vehicles in Chennai city in 3 locations at Alandur, Ambattur and Vyasarpadi. In addition, 236 private agencies have been authorised by the Transport Department in Chennai city to check the emission level of the vehicles. Further, the Board has established vehicle emission monitoring stations at Dindigul, Palani, Udthagamandalam (2 stations), and Chengalpattu. The Board has upgraded and computerised all its vehicle emission monitoring stations for testing diesel driven vehicles and computerisation is under process for petrol driven vehicles.

The Board has initiated action to check the emission levels of the buses run by the Metropolitan Transport Corporation of Chennai Limited. 6 computerised emission testing centers have been provided by the Board in the Metropolitan Transport Corporation Depots at Adyar, Alandur, Ayanavaram, Anna Nagar, Vadapalani and Tondiarpet. Other Transport Corporations have also been instructed to closely monitor the emission levels of their buses. All the Government Corporations and Departments have been requested to ensure that their vehicles do not exceed the emission norms so as to set an example to others.

For controlling vehicular emission, cleaner fuel like unleaded petrol, petrol with 3% benzene and low sulphur fuel (0.05%) have been introduced in Chennai Metropolitan Area. Passenger cars complying with Bharat stage-II norms alone are registered in Chennai since July 2001. 2T oil auto dispensing system have been provided in retail outlets. The Board is also participating in a research project with a Non-Governmental Organisation and the Civil Supplies Department to study the use of gas chromatograph to detect fuel adulteration. Action has already been taken to introduce auto liquefied petroleum gas in Chennai as it is a cleaner fuel. 12 auto liquefied petroleum gas dispensing stations have been commissioned at Koyambedu, Guindy, Avadi, Mogappair, Kilpauk, Ambattur, Chrompet, Waltax Road, Vyasarpadi, Royapuram, Ambattur Industrial Estate and Mount Road. Steps are being taken to popularise the use of liquefied petroleum gas for auto-rickshaws, call taxis and other private vehicles which will help in improving air quality.

The Board is assisting in the implementation of the action plan evolved for the improvement of air quality in Chennai city. Periodical reports on implementation of the action plan are being sent through the Environment and Forests Department, Government of Tamil Nadu to the Environment Protection and Control Authority, Delhi constituted as per the directions of the Hon'ble Supreme Court of India.

#### **4.13. Noise level monitoring**

Towards controlling noise pollution in urban areas, about 52,586 air horns were removed as of December 2004 from buses and lorries throughout the State. All the districts have been declared as air horn free districts. The Metropolitan Transport Corporation, Chennai was the first to declare its corporation 'air horn free'. Other transport corporations have followed suit. For noise level monitoring at the district level,

sophisticated noise level meters have been provided to the District Offices of the Board at the cost of Rs. 88.00 lakhs.

#### **4.14. Water quality monitoring**

Pollution of major rivers in the State is caused by the discharge of untreated sewage from the urban local bodies and panchayats and untreated or partially treated effluent from industries. The Board is collecting the samples periodically to monitor the quality of rivers and to instruct the polluters to take corrective measures. In case of industrial pollution, it is the responsibility of the industrial units to provide the required effluent treatment plants either individually or collectively so as to achieve the standards. Pollution abatement schemes are being implemented in the river stretches of Cauvery at Tiruchirapalli, Bhavani, Erode, Pallipalayam and Komarapalayam and in the river stretch of Vaigai at Madurai under the National River Conservation Programme. Other rivers and water sources are also proposed to be taken up for pollution abatement under the National River Conservation Programme.

#### **4.15. Water quality monitoring programmes**

Under the Global Environmental Monitoring System, the Board is closely monitoring the quality of water in the Cauvery basin at Mettur, Pallipalayam, Musiri and ground water quality at Musiri. Similarly, water quality of rivers Cauvery (16 stations), Tamiraparani (7 stations), Palar (1 station) and Vaigai (1 station) and three important lakes in Udthagamandalam, Kodaikkanal and Yercaud is being monitored under the Monitoring of Indian National Aquatic Resources System by the Board. The Board is continuously monitoring the Chennai city water ways to prevent pollution due to discharge of trade effluent from industries and sewage from local bodies and is collecting and analysing samples of river water and outfalls at regular intervals, since 1991. Strengthening the water quality monitoring of select river stretches and lakes including bio-monitoring will be taken up in association with educational institutions.

The Board is now creating awareness on non-point sources of pollution. One of the major non-point sources of pollution is from chemical based agriculture. Awareness measures taken by the Board have pointed out the need to shift to more eco-friendly organic agriculture by use of less chemical pesticides/fertilizers.

#### **4.16. Wastes management**

##### **4.16.1. Hazardous substances management**

The Board has taken effective steps for handling and management of hazardous chemicals and treatment and disposal of hazardous wastes in an environmentally safe manner. The Board has identified and inventorised 2,177 units generating hazardous wastes and compiled a computerised database of hazardous waste streams in respect of existing units as per the Hazardous Wastes (Management and Handling) Rules, 1989 as amended in 2000 and 2003.

The hazardous waste generators around Chennai, Kancheepuram and Thiruvallur districts have formed an Industrial Waste Management Association and identified a facilitator to put up a storage and disposal facility. Finalisation of the site for setting up the facility is under progress.

Based on the instructions of the Board, the federations of common effluent treatment plants at Tiruppur have identified a site at Nallur village, Karupagounderpalayam, Tiruppur taluk, Coimbatore district for establishing a common hazardous waste secured landfill facility. The site has been notified by the State Government. The federations of common effluent treatment plants in Karur have identified a site at Mathagiri village, Krishnarayapuram taluk, Karur district for establishing a secured landfill facility for disposal of sludge generated from treatment of textile dyeing effluents and the proposal is under process.

The Hazardous Wastes (Management and Handling) Amendment Rules, 2000 provide for implementation of environmentally sound management of hazardous wastes including their reprocessing or reuse as raw material and disposal of residues after extracting the reusable materials. In Tamil Nadu, hazardous wastes such as waste oil and lead from used batteries are being recycled in an environment friendly manner by the facilities, which are authorised by the Board and registered with the Ministry of Environment and Forests, Government of India. The Board is also exercising control over the generators and auctioneers. Only authorised and registered facilitators are allowed to handle these wastes.

In order to effectively monitor the compliance of hazardous waste generating units with the directions of the Hon'ble Supreme Court of India, four task force teams have been constituted and the task forces are monitoring the hazardous waste generating units for strict compliance of the Rules. It is further planned to strengthen this wing by utilising the services of research associates from reputed educational institutions.

#### **4.16.2. Municipal solid waste management**

With increasing urbanisation and rising levels of municipal solid wastes, an urgent task is to evolve scientific approaches to segregate, handle and dispose the solid wastes in urban areas. Tiruppur municipality has started segregation of waste at source and has engaged a private agency for composting the segregated waste. All the municipalities have started segregation and collection of waste at source and the composting work has begun. The Board has issued no objection certificates to 56 municipalities and to one corporation for their site identified for composting of municipal solid wastes. Out of this, authorizations have been issued to 11 municipalities to commence their composting works.

The project proposal furnished by the Udumalaipettai municipality on municipal solid waste management to make it a model has been approved and Rs. 30.00 lakhs has been released as first installment by the Central Pollution Control Board. Under the model eco-city project of the Government of India, renovation of 5 old tanks at Thajavur, improvements to slaughter house, garbage collection and disposal system are being taken up at a cost of Rs.135.00 lakhs. Detailed project proposal received from Thanjavur municipality has been forwarded to the Central Pollution Control Board for approval. Seed money of Rs. 1.00 lakh each has been given to Mamallapuram and Kanyakumari special grade panchayats to take up pilot projects in select towns to make them modern eco-cities.

Workshops for the local bodies on municipal solid waste management have been conducted in Chennai as well as in districts. From the year 2001 and upto 31.12.2004, 7 workshops have been conducted exclusively for the local bodies. Similarly various environmental awareness programmes towards achieving zero garbage

are being conducted at district levels regularly. 38 awareness programmes on source segregation of municipal solid wastes have been conducted with 9,260 participants in the last two years.

#### **4.16.3. Plastic wastes management**

Realizing the environmental problems caused by indiscriminate use and disposal of plastics, awareness has been created regarding reduction in the use of throwaway plastics through various campaigns. A mobile exhibition, exhibiting eco-friendly alternatives to plastics was arranged in Chennai city, which was inaugurated by the Hon'ble Chief Minister of Tamil Nadu on 03.08.2001. District level programmes on 'Children Against Plastic' were launched in September 2001. Financial assistance of Rs.1.25 lakh was provided to each District Collector for the conduct of campaigns to encourage the use of eco-friendly alternatives to throwaway plastics in their districts. Billboards educating people against the use and disposal of throwaway plastics were placed on Metropolitan Transport Corporation buses, in Chennai. Awareness campaigns are conducted in tourist towns and other pilgrim centres. As an alternative to plastics, training programmes for the production of palm leaf products have been conducted to self help groups in Vellore, Cuddalore, Salem, Kancheepuram, Thiruvannamalai, Erode, Kodaikanal, Thoothukudi, Ponneri and Chennai (3 programmes) through the Central Palmgur and Palm Products Institute of Village Industries Commission.

#### **4.16.4. Biomedical wastes management**

The Board enforces the Biomedical Waste (Management and Handling) Rules, 1998 as amended in 2000. As part of this process, the Board has so far inventorised 317 Government hospitals and 1,835 private hospitals. The Board has issued directions to the Government and private hospitals to take time bound action for identifying sites and setting up common facilities for management of biomedical wastes in coordination with Indian Medical Association. So far 11 sites have been identified by the Indian Medical Association for establishing the common biomedical waste treatment and disposal facilities for the private health care units. These 11 common facilities have been issued authorization, out of which 6 common facilities at Thenmelpakkam village and Chennakuppam village in Kancheepuram district, Kandipedu village in Vellore district, Sengipatti village in Thanjavur district, Muthuvoyal village in Ramanathapuram district and Coonoor in the Nilgiris district are under operation. 5 common facilities at Orathukuppai village in Coimbatore district (2 facilities), Thangayur village in Salem district, Undirumikkadakulam village in Virudhunagar district and Ettankulam village in Tirunelveli district are under establishment. The components of a common biomedical waste treatment and disposal facility are autoclave, shredder, compactor, incinerator for anatomical waste, secured landfill facility, laboratory and vehicles for transportation of wastes.

The Board has conducted training in management of biomedical wastes for its own staff, members of Indian Medical Association and other medical and para medical personnel. A separate Bio Medical Waste Training cell has been set up in the Board Office. Training of staff in Government hospitals in and around Chennai city have been taken up in coordination with Consumer Action Group, a non governmental organisation with expertise in the field.

#### **4.17. Other activities of the Board**

##### **4.17.1. Applied research and development**

The Board has established an applied research and development wing in the Advanced Environmental Laboratory at Chennai for developing cleaner technologies that would reduce the generation of pollution. The Board has established a research fund from cess fund of the Board to assist various institutions for conducting research studies in the field of environmental protection, pollution control and development of cleaner technologies. A committee has been formed to scrutinise and select suitable projects for assistance based on the thrust areas identified by the field officers of the Board.

##### **4.17.2. Environmental training institute**

The Board has established an Environmental Training Institute with Danish assistance of Rs.4.00 crores at its head office to impart training to industries, local bodies, Non-Governmental Organisations and the staff of the Board to enable to monitor and advise on pollution abatement and prevention techniques. The Environmental Training Institute has conducted 230 training programmes and trained 9,764 participants from its inception upto 31.12.2004. The Environmental Training Institute of the Board is proposed to be upgraded so as to perform a proactive role in the promotion of environmental tools and technologies in association with reputed institutions.

##### **4.17.3. Environmental awareness**

An environmental pavilion set up at Periyar Science and Technology Centre, Chennai conducts painting, essay writing and oratorical contests on environmental issues. Video films and short films are screened. The Board has established a pollution awareness and assistance cell in the Corporate office. Environmental awareness programmes are being conducted regularly. During the current year, upto 31.12.2004, 31 awareness programmes have been conducted with 38,000 participants. Special awareness campaigns are conducted against air and noise pollution during festival seasons such as Deepavali and Bhogi. These campaigns have been quite successful. Awareness programme regarding permitted activities in residential area is being taken up so as to ensure that residential areas remain unpolluted. During the year 2004-2005, the Board has sanctioned and given Rs. 1.00 lakh each to all the District Collectors for promoting eco-friendly pilgrim centers and for creating awareness regarding various environmental issues through Non-Governmental Organisations, environmental activists and volunteers.

#### **4.18. Schemes**

##### **4.18.1. Preparation of environmental atlas**

The Board with assistance of the Central Pollution Control Board is implementing the spatial environmental planning programme for preparing district environmental atlas in respect of Thiruvallur, Kancheepuram, Coimbatore, Vellore and Thoothukudi districts. The environmental management plan for Chennai city has also been prepared and submitted for finalisation to the Central Pollution Control Board.

#### **4.18.2. Externally aided projects**

The Board has signed an agreement on 24.11.2000 with the United States Trade and Development Agency to conduct a feasibility study on industrial waste water recycling and reuse for the tanneries in the Vellore region. The entire project cost is 1,80,100 in United States Dollar. The study has been completed and the final report from the agency appointed by the United States Trade and Development Agency is awaited.

#### **4.18.3. Green awards**

To encourage the District Collectors to play a proactive role in promoting sustainable development in their districts, the Government has instituted green awards for protection of the environment. Green awards are given to the District Collectors based on the assessment of the personal contribution of the Collectors to the promotion of environmental protection and sustainable development. These awards have motivated Collectors to focus on the issues relating to environment in their districts. Green awards were also given to the municipal commissioners for the year 2003-2004. Green Innovators Award was given during the year 2003 to an industrial unit, which has contributed innovatively in tackling a major industrial pollution problem in the textile processing industry.

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